

# INDEX TO VOLUME 37

METAL INDUSTRY, January-December, 1939

## ARTICLES

Abrasive Operations, Definitions of Terms Describing	31
Adherence of Organic Coatings to Metals	546
Alkaline Tin Plating Bath, A Study of the	161
Alloys, Identification of Light Metal	358, 408
Alloys, Metals and	6
Alloys, New Rolling Mill for Brass Copper and Copper Base	124
Alloys, Plating on Lead-Antimony	458
Alloys, Some Reflectivity Relationships of Individual Metals to Electroplated	111, 168
Aluminum, Anodic Coating of	513
Ammonia in Brass Plating Solutions, Determination of Free Sodium Cyanide and Analysis in the Plating Industry, Polarographic	171, 565
Analysis of the Cadmium Cyanide Complex, The Formula and	404
Analytical Determination of Metals, Conductometric Methods for	21
Annealing of Cold Rolled Strip, Continuous Strand	76
Annual National Metal Congress and Exposition to be held in Chicago, Oct. 23-27, The 21st	451
Anodes	14
Anodic Coating of Aluminum	513
Anodic Electrodeposition of Rubber on Metals	227
Antimonial Lead Castings, Application and Finishing of	218
Application and Finishing of Antimonial Lead Castings	218
Application of Hard Chromium Plating, The Applications of Supersonic Waves	415, 83
Automatic Plating	275
Booths, Development of Industrial Spray	63
Brass Copper and Copper Base Alloys, New Rolling Mill for	124
Brass Plating Solutions, Determination of Free Sodium Cyanide and Ammonia in	171
Bright Dipping of Non-Ferrous Metals	401
Bright Dipping of Stainless Steel	584
Bright Nickel Plating	365
Brighteners, Brittle Deposits and Peeling	430
Brittle Deposits and Peeling, Brighteners	430
Buffing, Grinding, Polishing and	8
Buffing Semi-Automatically, A New Method of Polishing and	71
Cadmium, Coloring of	123
Cadmium Cyanide Complex, The Formula and Analysis of the	404
Cadmium Electrodeposits, The Testing and Stripping of Zinc and	175, 211
Calculating Paint Mileage, Chart for	122
Calculations, Finishing Cost	77
Cans, Hot-Dip Tinning of Milk Cans and Ice Cream	573
Centrifugal Lacquering	115
Chart for Calculating Paint Mileage	122
Chromium Plating, The Application of Hard Circulatory Systems for Organic Finishing Materials	265
Cleaning, Metal	10
Coatings, Effects of Temperature on Plated	469
Coatings to Metals, Adherence of Organic	546
Cobalt Plating, A Resume of	84
Cold Rolled Strip, Continuous Strand Annealing of	76
Coloring of Cadmium	123
Conductometric Methods for Analytical Determination of Metals	21
Constructive Pre-plating Methods	267, 323
Continuous Strand Annealing of Cold Rolled Strip	76
Control of pH, The Measurement and	270, 317
Convention at Asbury Park, Electroplaters Hold Successful	309
Conveyor Oven Capacity, Increasing	540
Copper and Copper Base Alloys, New Rolling Mill for Brass	124
Copper and Its Alloys, Preventing Oxidation and Tarnishing of	216
Copper Solutions, Determination of Tartrates in Cyanide	580
Correction	80
Correction	510
Cost Calculations, Finishing	77
Cyanide and Ammonia in Brass Plating Solutions, Determination of Free Sodium	171

Definitions of Terms Describing Abrasive Operations	31
Degreasing, Recent Developments in Solvent and Vapor	411
Depositing Uniform Thicknesses of Metal for Plating to Specifications	24
Deposits and Peeling, Brighteners, Brittle	430
Determination of Free Sodium Cyanide and Ammonia in Brass Plating Solutions	171
Determination of Metals, Conductometric Methods for Analytical	21
Determination of Tartrates in Cyanide Copper Solutions	580
Development of Filters for Plating Solutions	27
Development of Industrial Spray Booths	63
Developments in Electroplating and Finishing During 1938, Review of Technical	3
Developments of 1938 in Supplies and Equipment for Plating and Finishing	6
Diffusion in Solid Metals, The Influence of Microstructure Upon the Process of	523
Dipping of Non-Ferrous Metals, Bright	401
Dipping of Stainless Steel, Bright	585
Drag-Out Losses from Plating Solutions	215
Drag-Out, Measurement of	320
Effects of Temperature on Plated Coatings, The	469
Electrochemical Society a Success, New York Meeting of the	454
Electrodeposition of Synthetic Resins	550
Electroforming with Iron	461
Electroplater, The Value of the Microscope to the	255, 325, 355
Electroplaters Hold Successful Convention at Asbury Park	309
Electroplating and Finishing During 1938, Review of Technical Developments in	3
Electroplating Digest	37, 84, 131, 182, 227, 281, 335, 377, 421, 476, 524, 584, 585
Electroplating of Automobile Parts in the Soviet Union	500
Electroplating Solutions, Filtration of	117
Enamels, Equipment for Lacquers and	16
Enamels, Lacquers and	15
Equipment for Lacquers and Enamels	16
Equipment for Plating and Finishing, Developments of 1938 in Supplies and	6
Equipment, Miscellaneous Special	17
External Heating of Plating Solutions	273
Fast Curing Synthetic Finishes	19
Filters for Plating Solutions, Development of	27
Filtration of Electroplating Solutions	117
Finishes, Fast Curing Synthetic	19
Finishing Cost Calculations	77
Finishing, Developments of 1938 in Supplies and Equipment for Plating and	6
Finishing During 1938, Review of Technical Developments in Electroplating and	3
Finishing Methods, A Review of	370
Finishing of Antimonial Lead Castings, Application and	218
Finishing, Quality and Quantity in Metal	69
Finishing Solid Gold Jewelry	72
Fire Protection, Maintaining First-Aid	330
Formula and Analysis of the Cadmium Cyanide Complex, The	404
Galvanizing Equipment, Gas-Fired	577
Galvanizing in 1938, A Review of Hot	5
Gas-Fired Galvanizing Equipment	577
Generators	12
Gold and Silver from Plating Solutions, Recovery of	160
Gold Jewelry, Finishing Solid	72
Gold Plating Industry, Racks vs. Wires in the	465
Grinding, Polishing and Buffing	8
Gun in Industry, The Spray	221
Hard Chromium Plating, The Application of Hardness of Electrodeposited Metals	415
Heating of Plating Solutions, External	502, 273
High Lead-Low Tin Alloys as Coating Materials	511
Hot-Dip Tinning of Milk Cans and Ice Cream Cans	573
Hot Galvanizing in 1938, A Review of	5
Identification of Light Metal Alloys	358, 408
Impurities in Plating Solutions	259
Increasing Conveyor Oven Capacity	540
Indium Plating, A Resume of	421
Industrial Spray Booths, Development of	63

Influence of Microstructure Upon the Process of Diffusion in Solid Metals	523
Iron, Electroforming with	461
Iron Plating, A Resume of	377
Japanning Department, Useful Pointers for the	541
Jewelry, Finishing Solid Gold	72
Lacquering, Centrifugal	115
Lacquers and Enamels	15
Lacquers and Enamels, Equipment for	16
Lead-Antimony Alloys, Plating on	458
Lead Castings, Application and Finishing of Antimonial	218
Lead-Low Tin Alloys as Coating Materials, High	511
Lead Plating, A Resume of	281, 335
Lead-Tin Alloys, Metal Spraying of	207
Light Metal Alloys, Identification of	358, 408
Magnesium Alloys, Surface Treatment of	544
Maintaining First-Aid Fire Protection	330
Measurement and Control of pH, The	270, 317
Measurement of Drag-Out	320
Metal Cleaning	10
Metal Congress and Exposition to be held in Chicago, Oct. 23-27, The 21st Annual	451
Metal Finishing, Quality and Quantity in	69
Metal Spraying	361
Metal Spraying of Lead-Tin Alloys	207
Metal Spraying, Salvaging of Equipment by Metal Stampings, Production of Nameplates and	571, 67
Metallurgical Digest	36, 83, 130, 181, 378, 422, 475, 523
Metals and Alloys	6
Metals, Conductometric Methods for Analytical Determination of	21
Metals to Electroplated Alloys, Some Reflectivity Relationships of Individual	111, 168
Method of Semi-Automatically Polishing and Buffing, A New	71
Methods, A Review of Finishing	370
Methods for Analytical Determination of Metals Conductometric	21
Microscope to the Electroplater, the Value of the	255, 325, 355
Mileage, Chart for Calculating Paint for	122
Milks Cans and Ice Cream Cans, Hot-Dip Tinning of	573
Mill for Brass Copper and Copper Base Alloys, New Rolling	124
Miscellaneous Special Equipment	17
Nameplates and Metal Stampings, Production of	67
New York Meeting of the Electrochemical Society a Success	454
Nickel Plating, Bright	365
Organic Finishing Materials, Circulatory Systems for	265
Oven Capacity, Increasing Conveyor	540
Oxidation and Tarnishing of Copper and Its Alloys, Preventing	216
Paint Films, The Thickness of Wet and Cured	328
Paint Mileage, Chart for Calculating	122
Patents of Interest to Electroplaters	335, 476, 524
Peeling, Brighteners, Brittle Deposits and	430
pH, The Measurement and Control of	270, 317
Plated Coatings, The Effects of Temperature on	469
Plating, A Resume of Cobalt	84
Plating, A Resume of Indium	421
Plating, A Resume of Lead	281, 335
Plating and Finishing, Developments of 1938 in Supplies and Equipment for	6
Plating on Lead-Antimony Alloys	458
Plating, Resume of Platinum	131, 182
Plating Solutions, Development of Filters for	27
Plating Solutions, Drag-Out Losses from	215
Plating Solutions, External Heating of	273
Plating Solutions, Impurities in	259
Plating Tanks	13
Plating, The Application of Hard Chromium	415
Plating to Specifications, Depositing Uniform Thicknesses of Metal for	24
Platinum Plating, Resume of	131, 182

Polarographic Analysis in the Plating industry	365
Polishing and Buffing, Grinding	8
Polishing and Buffing Semi-Automatically, A New Method of	71
Polishing, Practical Up-to-Date	186
Practical Up-to-Date Polishing	186
Pre-plating Methods, Constructive	267, 323
Preventing Oxidation and Tarnishing of Copper and Its Alloys	216
Production of Nameplates and Metal Stampings	67
Properties, Heat Treatment and Finishing of Stainless Steels	503
Protection of Silver by the Electrolytic Deposition of Beryllia	507
Quality and Quantity in Metal Finishing	69
Quantity in Metal Finishing, Quality and	69
Racks vs. Wires in the Gold Plating Industry	465
Recent Developments in Solvent and Vapor Degreasing	411
Recovery of Gold and Silver from Plating Solutions	160
Rectoplaters, The	384
Reels, Constant Tension	78
Reflectivity Relationships of Individual Metals to Electroplated Alloys, Some	111, 168
Resins, Electrodeposition of	550
Resume of Cobalt Plating	84
Resume of Indium Plating, A	421
Resume of Iron Plating, A	377
Resume of Lead Plating, A	281, 335
Resume of Platinum Plating, A	131, 182
Review of Finishing Methods, A	370
Review of Hot Galvanizing in 1938	5
Review of Technical Developments in Electroplating and Finishing During 1938	3
Roller Strip, Continuous Strand Annealing of Cold	76
Roller Zinc	79
Rolling Mill for Brass Copper and Copper Base Alloys, New	124
Routine Tests for Tinplate	406
Rubber on Metals, Anodic Electrodeposition of	227
Salvaging of Equipment by Metal Spraying	571
Silver by the Electrolytic Deposition of Beryllia, The Protection of	507
Silver from Plating Solutions, Recovery of Gold and	160
Sodium Cyanide and Ammonia in Brass Plating Solutions, Determination of Free Solutions, Development of Filters for Plating	27
Solvent and Vapor Degreasing, Recent Developments in	411
Some Reflectivity Relationships of Individual Metals to Electroplated Alloys	111
Soviet Union, Electroplating of Automobile Parts in the	500
Special Equipment, Miscellaneous	17
Specifications, Depositing Uniform Thicknesses of Metal for Plating to	24
Spray Booths, Development of Industrial	63
Spray Gun in Industry, The	221
Spraying, Metal	361
Spraying of Lead-Tin Alloys, Metal	207
Spraying, Salvaging of Equipment by Metal	571
Stainless Steel, Bright Dipping of	585
Stainless Steels, Properties, Heat Treatment and Finishing of	503
Stampings, Production of Nameplates and Metal	67
Steel, Bright Dipping of Stainless	585
Strip, Continuous Strand Annealing of Cold Rolled	76
Stripping of Zinc and Cadmium Electrodeposits, The Testing and	175, 211
Study of the Alkaline Tin Plating Bath	161
Supplies and Equipment for Plating and Finishing, Developments of 1938 in	6
Surface Treatment of Magnesium Alloys	544
Synthetic Finishes, Fast Curing	19
Systems for Organic Finishing Materials, Circulatory	265
Tanks, Plating	13
Tarnishing of Copper and Its Alloys, Preventing Oxidation and	216
Tartrates in Cyanide Copper Solutions, Determination of	580
Technical Developments in Electroplating and Finishing During 1938, Review of	3
Temperature on Plated Coatings, The Effects of	469
Tension Reels, Constant	78
Terms Describing Abrasive Operations, Definitions of	31
Testing and Stripping of Zinc and Cadmium Electrodeposits, The	175, 211
Tests for Tinplate, Routine	406
Thickness of Wet and Cured Paint Films, The	328
Thicknesses of Metal for Plating to Specifications, Depositing Uniform	24
Tin Alloys as Coating Materials, High Lead-Low	511
Tin Plating Bath, A Study of the Alkaline Tinning of Milk Cans and Ice Cream Cans, Hot-Dip	161
Tinplate, Routine Tests for	573
Tinplate, Routine Tests for	406

Useful Pointers for the Japanning Department	541
Value of the Microscope to the Electroplater, The	255, 325, 411
Vapor Degreasing, Recent Developments in Solvent and	411
Water in the Plating Room	165
Wires in the Gold Plating Industry, Racks vs.	465
Zinc and Cadmium Electrodeposits, The Testing and Stripping of	175, 211
Zinc, Rolled	79

## AUTHORS

Augsburger, Dale. External Heating of Plating Solutions	273
Belke, William E. Development of Filters for Plating Solutions	27
Bishop, J. W., Electroforming with Iron	461
Bower, B. F. A New Method of Polishing and Buffing Semi-Automatically	71
Bucy, E. H. Fast Curing Synthetic Finishes	19
Bull, A. W. Electroforming with Iron	461
Carlson, Fred M. Gas-Fired Galvanizing Equipment	577
Cinamon, Lionel. Plating on Lead-Antimony Alloys	458
Cinamon, Lionel. Some Reflectivity Relationships of Individual Metals to Electroplated Alloys	111, 168
Clark, W. R. New Rolling Mill for Brass Copper and Copper Base Alloys	124
Cleveland, Carleton. Circulatory Systems for Organic Finishing Materials	265
Cleveland, Carleton. Development of Industrial Spray Booths	63
Cleveland, Carleton. Metal Spraying	361
Cleveland, Carleton. Recent Developments in Solvent and Vapor Degreasing	411
Cleveland, Carleton. The Spray Gun in Industry	221
Edwards, Dr. Junius D. Anodic Coating of Aluminum	513
Egeberg, Dr. B. The Testing and Stripping of Zinc and Cadmium Electrodeposits	175, 211
Egeberg, Dr. B. The Value of the Microscope to the Electroplater	255, 325, 355
Epstein, Eugene. Plating on Lead-Antimony Alloys	458
Erskine, William J. Coloring of Cadmium	123
Faulhaber, Frank V. Useful Pointers for the Japanning Department	541
Fox, Frank. Production of Nameplates and Metal Stampings	67
Fulforth, Frederick. Constructive Pre-plating Methods	323
Goodsell, R. M. The Application of Hard Chromium Plating	415
Grant, Dr. J. Conductometric Methods for Analytical Determination of Metals	21
Grant, Leo. Surface Treatment of Magnesium Alloys	544
Haas, Joseph. Depositing Uniform Thicknesses of Metal for Plating to Specifications	24
Hall, Nathaniel. Application and Finishing of Antimonial Lead Castings	218
Hall, Nathaniel. The Formula and Analysis of the Cadmium Cyanide Complex	404
Hall, Nathaniel. The Measurement and Control of pH	270, 317
Heiman, Samuel. A Study of the Alkaline Tin Plating Bath	161
Heiman, Samuel. Determination of Free Sodium Cyanide and Ammonia in Brass Plating Solutions	171
Hoare, W. E. Routine Tests for Tinplate	406
Hogaboom, George B. Automatic Plating	275
Hogaboom, George B. Water in the Plating Room	165
Hogaboom, Jr., G. B. The Measurement and Control of pH	270, 317
Hubel, John E. Salvaging of Equipment by Metal Spraying	571
Imhoff, Wallace G. A Review of Hot Galvanizing in 1938	5
Imhoff, Wallace G. Hot-Dip Tinning of Milk Cans and Ice Cream Cans	573

Ingersoll, E. Centrifugal Lacquering	115
Ingersoll, E. F. Properties, Heat Treatment and Finishing of Stainless Steels	503
Kelton, E. H. Rolled Zinc	79
Klinkenstein, Gustave. A Review of Finishing Methods	370
Kushner, Joseph B. A Resume of Indium Plating	421
Kushner, Joseph B. A Resume of Iron Plating	377
Kushner, Joseph B. A Resume of Lead Plating	281, 335
Kushner, Joseph B. High Lead-low Tin Alloys as Coating Materials	511
Kushner, Joseph B. Measurement of Drag-Out	320
Kushner, Joseph B. Patents of Interest to Electroplaters	335, 476, 524
Kushner, Joseph B. Racks vs. Wires in the Gold Plating Industry	465
Kushner, Joseph B. Resume of Platinum Plating	131, 182
Lawrence, M. E. Metal Spraying of Lead-Tin Alloys	207
Linick, Leslie L. Brighteners, Brittle Deposits and Peeling	430
Lo Presti, Philip J. Drag-Out Losses from Plating Solutions	215
Lucasse, Walter W. A Study of the Alkaline Tin Plating Bath	161
McNabb, Wallace M. Determination of Free Sodium Cyanide and Ammonia in Brass Plating Solutions	171
Maar, Leonard F. Maintaining First-Aid Fire Protection	330
Mallory, H. R. The Rectoplaters	384
Mattacotti, Vincent. Impurities in Plating Solutions	259
Meyer, Dr. Walter R. Bright Dipping of Non-Ferrous Metals	401
Meyer, Dr. Walter R. Filtration of Electroplating Solutions	117
Meyer, Dr. Walter R. Review of Technical Developments in Electroplating and Finishing During 1938	3
Oldham, Paul A. Finishing Solid Gold Jewelry	72
Orbaugh, M. H., Electroforming with Iron	461
Price, L. Preventing Oxidation and Tarnishing of Copper and Its Alloys	216
Price, L. E. Protection of Silver by the Electrolytic Deposition of Beryllia	507
Promisel, Nathan E. The Testing and Stripping of Zinc and Cadmium Electrodeposits	175, 211
Promisel, N. E. Value of the Microscope to the Electroplater	255, 325, 355
Ritzenthaler, Phil. The Effects of Temperature on Plated Coatings	469
Rooney, Francis J. The Influence of Microstructure Upon the Process of Diffusion in Solid Metals	523
Ross, W. F. Continuous Strand Annealing of Cold Rolled Strip	76
Savage, Frank K. Recovery of Gold and Silver from Plating Solutions	160
Schaefer, Carl. A Resume of Cobalt Plating	84
Schaefer, Carl. Anodic Electrodeposition of Rubber on Metals	227
Schaefer, Carl. Electrodeposition of Synthetic Resins	550
Schuh, Dr. A. E. Adherence of Organic Coatings to Metals	546
Sheane, W. G. Chart for Calculating Paint Mileage	122
Sheane, Willoughby G. Finishing Cost Calculations	77
Sheane, Willoughby G. Increasing Conveyor Oven Capacity	540
Sheane, Willoughby G. The Thickness of Wet and Cured Paint Films	328
Sherrick, Paul. Polarographic Analysis in the Plating Industry	565
Siefen, J. F. Practical Up-to-Date Polishing	186
Simmons, George. Quality and Quantity in Metal Finishing	69
Stocker, O. A. Bright Nickel Plating	365
Stoddard, Jr., W. B. Determination of Tartrates in Cyanide Copper Solutions	580
Stoddard, Jr., W. B. Electroplating of Automobile Parts in the Soviet Union	500
Thews, Edmund R. Identification of Light Metal Alloys	358, 408
Thomas, G. J. Preventing Oxidation and Tarnishing of Copper and Its Alloys	216
Thomas, G. J. The Protection of Silver by the Electrolytic Deposition of Beryllia	507
Tierney, J. D. Plating Tanks	13

Wallace, E. H. Electroforming with Iron	461
Wills, H. J. Definitions of Terms Describing Abrasive Operations	31

## SHOP PROBLEMS

Alloys, Low Fusing	129
Aluminum, Bright Dip for Cast	226
Analysis of Boric Acid in Nickel Plating Solutions	279
Analysis of Cadmium and Nickel Plating Solutions	474
Analytical Solutions, On	420
Anodes out of Junk Copper	333
Atomizers, Gold Dip Finish on	375

Barff Finish on Cast Iron, Bower	179
Barrel Plating	180
Barrel Plating, Current in	35
Black Color on Pewter	82
Blistering of Silver Plate	474
Boric Acid in Low pH Nickel Solutions	82
Boric Acid in Nickel Plating Solutions	35
Boric Acid in Nickel Plating Solutions, Analysis of	279
Bower Barff Finish on Cast Iron	179
Brass, Chromium Plating on	179
Brass, Chromium Plating on	280
Brass Solutions, Rochelle Salts in	522
Brass, Tarnished	82
Bright Dip for Cast Aluminum	226
Bright Dipping Zinc	35
Bronze Finish, Statuary	522
Bronze, Green Color on Cast	226
Bronze Plating of Die Castings	420
Brushed Finish	82

Cable Sheath, Failure of Lead	35
Cadmium and Nickel Plating Solutions, Analysis of	474
Carburizing, Copper Plating for Selective	128
Case Hardened Steel, Plating on	225
Cast Iron, Bower Barff Finish on	179
Castings, Bronze Plating of Die	420
Castings, Faulty Nickel Solution for Plating Die	333
Centrifugal Lacquering	549
Chrome Plating Nameplates	376
Chromium Plating on Brass	179
Chromium Plating on Brass	280
Copper, Anodes Out of Junk	333
Copper Plating for Selective Carburizing	128
Copper, Wear Resistant Verde Finish on Sheet	279
Corroded Plated Door Stop	522
Current in Barrel Plating	35

Degreased Parts, Deposit on Vapor	473
Deposit on Vapor Degreased Parts	473
Die Castings, Bronze Plating of	420
Die Castings, Faulty Nickel Solution for Plating	333
Dip Finish on Atomizers, Gold	375
Dip for Cast Aluminum, Bright	226
Dissolving Gold	225
Drag Marks on Nickel Plated Brass	34

Engine Finish on Stainless Steel	375
Etched Finish	180

Failure of Lead Cable Sheath	35
Faulty Nickel Solution for Plating Die Castings	333
Finish on Atomizers, Gold Dip	375
Finish on Brass, Pewter	35
Finish on Sheet Copper, Wear Resistant Verde	279
Finish on Stainless Steel, Engine	375
Finish on Stainless Steel, Satin	375
Finishing of Knife Blades, Mirror	179
Floors, Plating Room	520
Foundry Sand	128

Gold Dip Finish on Atomizers	375
Gold, Dissolving	225
Gold Plating	334
Gold Plating Rack Metal	128
Green Color on Cast Bronze	226
Gun Metal Finish on Brass	35

Heavy Iron Plating	226
Hollow Ware, Silver on	473

Immersion Tinning	473
Iron Plating	474
Iron Plating, Heavy	226

Knife Blades, Mirror Finishing of	179
-----------------------------------	-----

Lacquer Effects, Marbleized	179
Lacquering, Centrifugal	549
Low Fusing Alloys	129
Lumps in Silver Plating	376

Manufacture of Stampers for Phonograph Records	583
Malleable Iron, Zinc Plating	225
Marbleized Lacquer Effects	179
Mercury Plating	34
Mirror Finishing of Knife Blades	179

Nameplates, Chrome Plating	376
Nickel Plating on Stainless Steel	180
Nickel Plating Solutions, Analysis of Cadmium and	474
Nickel Solution, Pitting in	584
Nickel Solution for Plating Die Castings, Faulty	333
Nickel, Tarnished	81
Normal Solutions	280

Paper, Sulfur-Free	280
Pewter, Black Color on	82
Pewter Finish on Brass	35
Phonograph Records, Manufacture of Stampers for	583
Pitting in Nickel Solution	584
Plating, Iron	474
Plating, Lumps in Silver	376
Plating of Die Castings, Bronze	420
Plating on Case Hardened Steel	225
Plating on Rubber-Lined Tank	81
Plating Room Floors	520

Rack Metal, Gold Plating	128
Records, Manufacture of Stampers for Phonograph	583
Recovering Rhodium	520
Reflectors, Tarnishing of Silver Plated	420
Rhodium Plating, Tanks for	334
Rhodium, Recovering	520
Rhodium Solution	82
Rochelle Salts in Brass Solutions	522
Rubber-Lined Tank, Plating on	81

Sand, Foundry	128
Satin Finish on Stainless Steel	375
Silver on Hollow Ware	473
Silver Plate, Blistering of	474
Silver Plate Terminology	34
Silver Plated Reflectors, Tarnishing of	420
Silver Plating, Lumps in	376
Silver, Yellow	334
Solutions, Analysis of Cadmium and Nickel Plating	474
Solutions, Normal	280
Solutions, On Analytical	420
Solution, Pitting in Nickel	584
Stained Watch Dials	520
Stained Steel, Engine Finish on	375
Stainless Steel, Nickel Plating on	180
Stainless Steel, Satin Finish on	375
Statuary Bronze Finish	522
Steel, Engine Finish on Stainless	375
Steel, Satin Finish on Stainless	375
Sulfur-Free Paper	280

Tank, Plating on Rubber-Lined	81
Tanks for Rhodium Plating	334
Tarnished Brass	82
Tarnished Nickel	81
Tarnishing of Silver Plated Reflectors	420
Terminology, Silver Plate	34
Thickness of Tin on Brass	129
Tin on Brass, Thickness of	129
Tinning, Immersion	473

Vapor Degreased Parts, Deposit on	473
Verde Finish on Sheet Copper, Wear Resistant	279

Watch Dials, Stained	520
Wear Resistant Verde Finish on Sheet Copper	279

Yellow Silver	334
---------------	-----

Zinc, Bright Dipping	35
Zinc Plating Malleable Iron	225

## ORGANIC FINISHING SECTION

### ARTICLES

Adherence of Organic Coatings to Metals	546, 598
---	----------

Blast Cleaning Methods, Modern Developments in	Oct., 9; Nov. 548
--	-------------------

Cleaning Methods, Modern Developments in Blast	Oct., 9; Nov. 548
--	-------------------

Coatings to Metals, Adherence of Organic	546, 598
--	----------

Color, The Spectrophotometer for Controlling	Oct. 4
--	--------

Conveyor Oven Capacity, Increasing	540
------------------------------------	-----

Dispensing Machines, The Organic Finishing of	Oct. 6
Drying with Heat Lamps, Radiant Energy	607

Electrodeposition of Synthetic Resins	550
Evaluation of Spray Operator Ability	Oct. 2

Fume Collection, Proper Hooding Increases Efficiency of Dust and	Oct. 3
--	--------

Heat Lamps, Radiant Energy Drying with	607
Hooding Increases Efficiency of Dust and Fume Collection, Proper	Oct. 3

Increasing Conveyor Oven Capacity	540
-----------------------------------	-----

Japanning Department, Useful Pointers for the	541
---	-----

Lamps, Radiant Energy Drying with Heat	607
--	-----

Magnesium Alloys, Surface Treatment of	544, 605
Modern Developments in Blast Cleaning Methods	Oct., 9; Nov. 548

Organic Finishing Digest	Oct. 13; Nov. 550, 608
Organic Finishing of Dispensing Machines, The	Oct. 6
Oven Capacity, Increasing Conveyor	540

Patents	Oct. 13
Proper Hooding Increases Efficiency of Dust and Fume Collection	Oct. 3

Radiant Energy Drying with Heat Lamps	607
Resins, Electrodeposition of Synthetic	550
Rust Proofing and Finishing of Unit Heater Casings and Convactor Enclosures	602

Solvents in Industry	609
Spectrophotometer for Controlling Color	Oct. 4

Spray Operator Ability, Evaluation of	Oct. 2
Surface Treatment of Magnesium Alloys	544, 605

Useful Pointers for the Japanning Department	541
--	-----

## AUTHORS

Brown, T. P. Radiant Energy Drying with Heat Lamps	607
--	-----

Cleveland, Carleton. Modern Developments in Blast Cleaning Methods	Oct. 9; Nov. 548
--	------------------

Donovan, D. K. The Spectrophotometer for Controlling Colors	Oct. 4
---	--------

Faulhaber, Frank V. Useful Pointers for the Japanning Department	541
--	-----

Grant, Leo. Surface Treatment of Magnesium Alloys	544, 605
---	----------

Ickis, Jr., L. S. Radiant Energy Drying with Heat Lamps	607
---	-----

Jochim, E. W. The Organic Finishing of Dispensing Machines	Oct. 6
--	--------

Perkins, C. T. Rust Proofing and Finishing of Unit Heater Casings and Convactor Enclosures	602
--	-----

Schaefer, Carl. Electrodeposition of Synthetic Resins	550
Schuh, Dr. A. E. Adherence of Organic Coatings to Metals	546, 598

Sheane, Willoughby G. Evaluation of Spray Operator Ability	Oct. 2
--	--------

Sheane, Willoughby G. Increasing Conveyor Oven Capacity	540
---	-----

## SHOP PROBLEMS

Centrifugal Lacquering	549
------------------------	-----

Lacquering, Centrifugal	549
-------------------------	-----